Vol. XVIII, 1961

BLOOD
The Journal of Hematology

CONTENTS

No. 1

Decreased Erythrocyte survival in Hemoglobin H Disease As a Result of the Abnormal Properties of Hemoglobin H: The Benefit of Splenectomy..........Demetrios A. Rigas and Robert D. Koler 1
Hereditary Methemoglobinemia: A New Variant Exhibiting Dominant Inheritance of Methemoglobin A........Philip L. Townes and George R. Lovell 18
Glucose-6-Phosphate Dehydrogenase Deficiency in Greece Leda Zannos-Mariolea and Christos Kattamis 34
Studies of a Patient with Selective Deficiency in Absorption of Vitamin B_{12}........E. Colle, L. Greenberg and William Krivit 48
Hookworm Anemia: Iron Metabolism and Erythrokinetics Miguel Layrisse, Alfredo Paz, Norma Blumenfeld and Marcel Roche 61
Phospholipid Accumulation in Histiocytes of Splenic Pulp Associated with Thrombocytopenic Purpura.........Sidney L. Saltzstein 73
Separation of Platelets from Whole Blood by the Use of Silicone Liquids Mary C. Morgan and Jean J. Szafir 89
Measurement of Absorption of Vitamin B_{12} by Whole-Body Gamma Spectrometry........P. G. Reizcnstein, Eugene P. Cronkite and S. H. Cohn 95
Brief Note: The Use of Desoxyribonuclease As an Aid to the Identification of Primitive White Blood Cells........Edward Gardner, Jr., Claude-Starr Wright and Bettie Z. Williams 102
News and Views ...................................................... 104
Book Reviews .......................................................... 110
Abstracts .............................................................. 114

No. 2

Red Cell Filtration and the Pathogenesis of Certain Hemolytic Anemias James H. Janell, Richard L. Simmons and William B. Castle 133
The Mode of Inheritance of PTA Deficiency: Evidence for the Existence of Major PTA Deficiency and Minor PTA Deficiency Samuel L. Rapapor, Robert R. Proctor, Mary Jane Patch and Maurice Yettra 149
On the Possibility of Cure of Malignant Lymphoid Tumors. I. Treatment of Autochthonous Lymphoid Tumors in C57BL Mice with Massive Doses of Lymphocytolytic Agents. .............Henry S. Kaplan and C. Susan Nagareda 166

Synthesis of M Protein by Mouse Myeloma Tumor: Correlation of In Vitro and In Vivo Methods. .............Wayne E. Truax and Juanita P. Bray 176

Studies of the Irradiation Protection Effect of Fetal Liver in Mice. I. Influence of the Gestational Age of the Donor Tissue 
Paul N. Tschetter, John H. Githens and M. Giovannella Moscovici 182

Relation Between Severity of Anemia and Erythropoietin Titer in Human Beings. ....Donald C. Van Dyke, Miguel Layrisse, John H. Lawrence Joseph F. Garcia and Myron Pollycoe 187

Leukocytic Alkaline Phosphatase in Busulfan Induced Remissions of Chronic Granulocytic Leukemia. .............E. Xefteri, W. J. Mitus, I. B. Mednicoff and William Dameshek 202


Hemolysis In Vitro and the Anemia of Leukemia. ....William H. Crosby, Calogero Vullo and Sergio Garriga 220

Clinical Section: Modern Methods for Quantitation of Red Blood Cell Production and Destruction: Erythrokinetics. ....................... 225

The Use of FE59 and CR55 for Estimating Red Cell Production and Destruction: An Interpretive Review....Frederick Stohlman, Jr. 236

News and Views ............................................. 251

Book Reviews ............................................... 251

Abstracts ..................................................... 257

No. 3

Studies on the Fetal Hemoglobin in the Persistent High Hb-F Anomaly 
R. B. Thompson, J. W. Mitchener and Titus H. J. Huisman 267

Pyridoxine-Responsive Anemia .............Spencer O. Raab, Arthur Haut, George E. Cartwright and Maxwell M. Wintrobe 285

Repeated Plasmapheresis of Blood Donors As a Source of Platelets 
Allan Kliman, Lawrence A. Gaydos, Leslie R. Schroeder and Emil J. Freireich 303

In Vivo Cultivation of Leukocytes in Diffusion Chambers: Requirement of Ascorbic Acid for Differentiation of Mononuclear Leukocytes to Fibroblasts..................Nicholas L. Petrakis 310


The Colchicine Method in the Study of Bone Marrow Cell Proliferation Giuseppe Cardinali, Giuliana Cardinali and Marie F. Agrifoglio 328

The Effect of 6-Mercaptopurine on the Incorporation of Labeled Amino Acids into Cellular Protein of Chronic Granulocytic Leukemia Leuko-
cytes... Samuel B. Nadler, Hans J. Hansen, Charles C. Sprague and Harry Sherman 336

Studies of the Irradiation Protection Effect of Fetal Liver in Mice. II. Storage by Freezing... John H. Githens, Paul N. Tschetter, M. Giovannella Moscovici and William E. Hathaway 344

pH Dependent Hemolytic Systems. III. The Physical Properties of the Serum Factors Involved, with Some Observations on Their Occurrence in Various Disease States in Man... Stanley Yachnin and Frank H. Gardner 349

Influence of Spleen on Thrombocytopenia Induced by Humoral Factor(s) of Experimental Hypersplenism... Ruy Pérez-Tamayo, Silvia Mejía and Irngard Montfort 364

Editorial: The Etiologic Role of Radiation in the Development of Leukemia... Eugene P. Cronkite 370

Abstracts ................................. 377

No. 4

S-C Hemoglobin: A Clinical Study... George L. River, Anita B. Robbins and Steven O. Schwartz 385

Porphyrin Concentration and Myeloperoxidase Activity in the Tissues of the Shay Chloroma of the Rat... Gabriel Kelényi, Julius Pongrátz, Stephen Orbán and Georg Deák 417

Bone and Marrow Transplants in the Rat... Andrew D. Dorr, William C. Moloney, Geraldine Dowd and Antonio E. Boschetti 423

Studies of Sequential and Combination Antimetabolite Therapy in Acute Leukemia: 6-Mercaptopurine and Methotrexate

Acute Leukemia Group B .............................. 431

The Effect of Sodium Nitrite and Para-Aminopropriophenone Administration on Blood Hemoglobin Levels and Red Blood Cell Survival

Ernest Beutler and Barbara J. Mikus 455

The Segmental Nature of the Spleen... B. J. van R. Dreyer 468

Brief Note: Plastic Tube Technic of Centrifugal Separation of Leukocytes from Human Blood... Lennart Juhlin and Walter B. Shelley 477

News and Views ................................. 481

Abstracts ................................. 482

No. 5

A Syndrome Resembling Adrenal Cortical Insufficiency Associated with Long Term Busulfan (Myleran) Therapy... Robert A. Kyle, Robert S. Schwartz, Herman L. Oliner and William Dameshek 497

CONTENTS

Hydroxocobalamin. II. Absorption from the Site of Injection and Uptake by the Liver and Calf Muscle in Man........George B. Jerzy Glass, Duk Ho Lee and William W. Hardy 522

Studies on the Production of Erythropoietin by Isolated Perfused Organs Z. Kuratowska, B. Lewartowski and E. Michalak 527

An Unidentified Erythropoietic Substance in Liver......Daniel L. Horrigan 535

Anemia with Positive Direct Coombs’ Test Induced by Trypan Blue David V. Brown, Eva M. Boehni and Lorna M. Norland 543

Differences Between Lymphocytes of Leukemic and Non-Leukemic Patients with Respect to Morphologic Features, Motility, and Sensitivity to Guinea Pig Serum........Robert Schrek and William J. Donnelly 561

Alkaline Phosphatase Activity of Exudative Leukocytes in Acute Leukemia Pasquale E. Perillie and Stuart C. Finch 572

Leukocyte Drumsticks in Chronic Granulocytic Leukemia and Related Disorders........Masanobu Tomonaga, Gen Matsuura, Bunro Watanabe, Yasuro Kamochi and Noboru Ozono 581


A Microelectrophoresis Chamber of Small Volume for Use with Biological Systems.........................G. V. F. Seaman and D. H. Heard 599

Review of Austrian Hematologic Literature—Year 1960 Anton Hittmair 605

News and Views ................................................................. 608

American Society of Hematology Program .................. 609

Abstracts ................................................................. 614

No. 6

The Effect of "Minute" and "Titrated" Amounts of Folic Acid on the Megaloblastic Anemia of Tropical Sprue........T. W. Sheehy, M. E. Rubini, E. Perez-Santiago, R. Santini, Jr. and J. Haddock 623

Erythrokinetic Studies in Severe Bone Marrow Failure of Diverse Etiology Norman R. Gevirtz and Nathaniel I. Berlin 637

Abnormal ("Ringed") Sideroblasts in Various Hematologic and Non-Hematologic Disorders........Warren D. Bowman, Jr. 662

Study of Leukopenias and Thrombocytopenias by the Direct Antiglobulin Consumption Test on Leukocytes and/or Platelets........Jean Daussel, Jacques Colombani and Monique Colombani 672

The Lymphocyte-Like Cell in the Marrow of Rats........Charles Harris 691

Blood Coagulation Factors in Total Body Irradiation Herbert S. Sise, Jacques Gauthier, Robert Becker and John Bolger 702

A Study of Fibrinogen Turnover in Classical Hemophilia and Congenital Afibrinogenemia..........Aaron R. Rausen, Andre Cruchaud, Campbell W. McMillan and David Gitlin 710

The Plasma Disappearance of Radioactive Vitamin B12 in Myeloproliferative Diseases and Other Blood Disorders........Charles A. Hall 717
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies on Iron Absorption. I. The Relationships Between the Rate of</td>
<td>Gerald A. Mendel</td>
<td>727</td>
</tr>
<tr>
<td>Erythropoiesis, Hypoxia and Iron Absorption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studies on the Fate of Lymphocytes. I. Labeling Small Thymic Lympho-</td>
<td>Raymond G. Murray and Assia Murray</td>
<td>737</td>
</tr>
<tr>
<td>cytes with Tritiated Thymidine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hb I Trait in an Algerian Musselman Family, Presenting Two Abnormal</td>
<td>Cl. Boulard, A. Cosset, F. Destaing, A. Duzer, J. H. P. Jonxis, C. J. Muller and A. Portier</td>
<td>750</td>
</tr>
<tr>
<td>Components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case Report: Leukemia and Pregnancy: Observation of a Case Treated</td>
<td>Guillermo Ruiz Reyes and Ruben Tamayo Perez</td>
<td>764</td>
</tr>
<tr>
<td>with Busulfan (Myleran)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Editorial: The Hemoglobin Genes: A Remarkable Example of the Clustering of Related Genetic Functions on a Single Mammalian Chromosome</td>
<td>James V. Neel</td>
<td>769</td>
</tr>
<tr>
<td>Book Reviews</td>
<td></td>
<td>778</td>
</tr>
<tr>
<td>American Society of Hematology: Fourth Annual Meeting</td>
<td></td>
<td>780</td>
</tr>
<tr>
<td>Abstracts</td>
<td></td>
<td>809</td>
</tr>
</tbody>
</table>